

RECEIVED
CENTRAL FAX CENTER

JAN 31 2012

Serial No. 10/594,071
Docket No. SH-0068PCTUS
RYU.033

2

AMENDMENTS TO THE CLAIMS

Please add new claims 20-22 and amend the claims as follows:

1. (Currently Amended) A processing method of processing a glass base material for an optical fiber using a processing apparatus, the processing apparatus including:
 - a pair of rotatable chucks configured to directly or indirectly grasp respective ends of the glass base material in an axial direction of the glass base material and that are to perform relative displacement in an opposing direction;
 - a burner for heating the glass base material that is movable along the axial direction of the glass base material being grasped; and
 - at least one midway holding device configured to hold or support, by an adjustably supplied pressure, at least one midway part of the glass base material via a spring or an air cylinder, the processing method comprising:
 - processing the glass base material while preventing the glass base material from being brought into a cantilever state by always holding or supporting the glass base material at two or more points; and
 - moving the at least one midway holding device aside to a vicinity of at least one rotatable chuck in an elongation process and not during a first phase of heating of the elongation process so as not to hold or support the at least one midway part, a driving source of said moving comprising an air cylinder.
2. (Cancelled)
3. (Previously Presented) The processing method according to Claim 1, wherein at least one of two or more points, at which the glass base material is held or supported, comprises a midway part of the glass base material.
4. (Previously Presented) The processing method according to claim 1, wherein the glass base material is held at two or more midway parts.
5. (Withdrawn) A processing apparatus that processes a glass base material for an

Serial No. 10/594,071
Docket No. SH-0068PCTUS
RYU.033

3

optical fiber, the processing apparatus comprising:

a pair of rotatable chucks that directly or indirectly grasp respective ends of the glass base material in an axial direction of the glass base material and that are capable of performing relative displacement in an opposing direction;

a burner for heating the glass base material that is movable along the axial direction of the glass base material being grasped; and

at least one midway holding device that holds or supports a midway part of the glass base material.

6. (Withdrawn) The processing apparatus according to Claim 5, wherein a supporting mechanism of a holing part provided for the midway holding device has an absorption mechanism that absorbs power from the glass base material.

7. (Withdrawn) The processing apparatus according to Claim 6, wherein the absorption mechanism includes a spring or an air cylinder for receiving load from the glass base material.

8. (Withdrawn) The processing apparatus according to claim 5, wherein the holding part includes a heat resistant roller.

9. (Withdrawn) The processing apparatus according to Claim 8, wherein the heat resistant roller is a roller made of carbon.

10. (Withdrawn) The processing apparatus according to Claim 5, wherein the midway holding part is movable along the axial direction of the glass base material being grasped.

11. (Cancelled)

12. (Previously Presented) The processing method according to claim 3, wherein the glass base material is held at two or more midway parts.

Serial No. 10/594,071
Docket No. SH-0068PCTUS
RYU.033

4

13. (Withdrawn) The processing apparatus according to claim 6, wherein the holding part includes a heat resistant roller.

14. (Withdrawn) The processing apparatus according to claim 7, wherein the holding part includes a heat resistant roller.

15. (Currently Amended) The processing method according to claim 1, further comprising:

before the elongation process, welding a supporting rod to the glass base material,
wherein [[using]] the at least one midway holding device [[to]] holds or supports
the at least one midway part of the glass base material in a during the welding process before
the elongation process.

16. (Currently Amended) The processing method according to claim 1, further comprising:

after the elongation process, processing an end of the glass base material into a
spindle shape,

wherein [[using]] the at least one midway holding device is used to hold or support
the at least one midway part of the glass base material in a spindle shape process after the
elongation process during the processing the end of the glass base material.

17. (Currently Amended) The processing method according to claim 1, further comprising:

before the elongation process, welding a supporting rod to the glass base material; and
after the elongation process, processing an end of the glass base material into a
spindle shape,

wherein [[using]] the at least one midway holding device [[to]] holds or supports the
at least one midway part of the glass base material [[in a]] during the welding process before
the elongation process; and

wherein [[using]] the at least one midway holding device [[to]] holds or supports
the at least one midway part of the glass base material in a spindle shape process after the

Serial No. 10/594,071
Docket No. SH-0068PCTUS
RYU.033

5

~~elongation process during the processing the end of the glass base material.~~

18. (Currently Amended) The processing method according to claim 1, further comprising:

flame polishing the glass base material,

wherein said moving the at least one midway holding device aside to the vicinity of the at least one rotatable chuck [[in a]] is performed during the flame polishing process.

19. (Previously Presented) The processing method according to claim 1, wherein the processing apparatus further comprises:

a movable headstock that comprises one of a pair of rotatable chucks and that is movable along the axial direction of the glass tube material,

wherein the at least one midway holding device is movable along the axial direction of the glass base material independently from a movement of the movable headstock.

20. (New) The processing method according to claim 1, wherein the at least one midway holding device comprises:

a plurality of heat resistant rollers; and

a plurality of supporting arms to provide support for the heat resistant rollers.

21. (New) The processing method according to claim 20, wherein said moving comprises moving the supporting arms in a constant interval toward the pair of the rotatable chucks.

22. (New) The processing method according to claim 20, wherein said moving comprises:

releasing the at least one midway holding device from the at least one midway part of the glass base material; and

placing the at least one midway holding device to the vicinity of the at least one rotatable chuck.